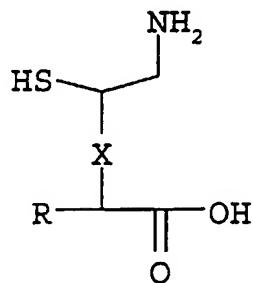


-16-

Claims

1. A compound comprising a polypeptide, the polypeptide having at a C-terminal end a pseudo amino acid, the pseudo amino acid having a side chain containing a 1-amino-2-thiol moiety.
2. A compound according to claim 1 wherein the polypeptide comprises the structure:



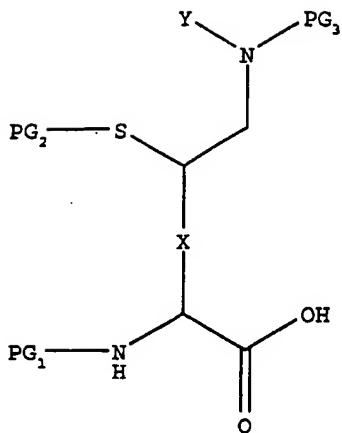
wherein:

R is a polypeptide chain;

X is a linker.

3. A compound according to claim 2 wherein the linker comprises (CH₂)_n, where n is 0 to 6, preferably 4.
4. A protected pseudo amino acid comprising the structure

-17-

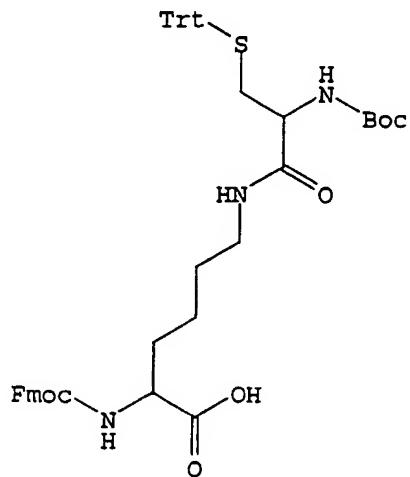


wherein:

Y is optionally H or other suitable residue; and
 PG₁, PG₂, and PG₃, are different protecting groups.

5. A protected pseudo amino acid according to claim 4 wherein the protecting groups are selected from the listed consisting of FMOC, BOC or Trt.

6. A protected pseudo amino acid according to claim 5 having the structure:



-18-

7. A process of producing a pseudo cysteine comprising the steps according to Figure 2.
8. A pseudo cysteine obtained by the method of claim 7.
9. A pseudo cysteine obtainable by the method of claim 7.
10. The use of a polypeptide of claim 1-3, a pseudo amino acid of claim 4-6 or a pseudo cysteine of claim 8-9, for producing a peptide or a protein by native chemical ligation.
11. The use of a polypeptide of claim 1-3, a pseudo amino acid of claim 4-6 or a pseudo cysteine of claim 8-9, for producing a homodimer.
12. The use of a polypeptide of claim 1-3, a pseudo amino acid of claim 4-6 or a pseudo cysteine of claim 8-9, for producing a heterodimer.
13. The use of a polypeptide of claim 1-3, a pseudo amino acid of claim 4-6 or a pseudo cysteine of claim 8-9, for producing an oligomer.